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EXAMINER	
O CONNOR, BRIAN T	
ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/632,813	VASUDEVAN ET AL.	
	Examiner	Art Unit	
	Brian T. O'Connor	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-21 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1-10, claim 1 is viewed as being incomplete for omitting essential element(s). See MPEP § 2172.01. The omitted element is a device that sends a schedule grant message.

With respect to claims 11-12, claim 11 is viewed as being incomplete for omitting essential element(s). See MPEP § 2172.01. The omitted element is a device that sends a schedule grant message.

With respect to claims 13-16, claim 13 is viewed as being incomplete for omitting essential element(s). See MPEP § 2172.01. The omitted elements are a device that sends a schedule grant message and a device for transmitting.

With respect to claim 17, the claim is viewed as being incomplete for omitting essential element(s). See MPEP § 2172.01. The omitted elements are a device that sends a schedule grant message and a device for transmitting.

With respect to claims 18-21, claim 18 is viewed as being incomplete for omitting essential element(s). See MPEP § 2172.01. The omitted element is a device that sends a schedule grant message.

With respect to claim 26, the claim is viewed as being incomplete for omitting essential element(s). See MPEP § 2172.01. The omitted element is a device that sends a schedule grant message.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 18-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to claim 18, the claimed subject matter is directed to manipulation of abstract ideas and thus is not statutory subject matter. The claimed reverse link control method for overriding a rate setting does not result in a practical application to provide a useful, concrete, and tangible result. There is no recited transmitting step in the claim. The Examiner also suggests the Applicant review the "Interim Guidelines for Statutory Subject Matter" published in the Official Gazette on November 22, 2005. Claims 19-21 do not direct the claimed subject matter to statutory subject matter.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-7, 11-14, 17, 18, 22, 23, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Padovani et al. (US 6,574,211; hereafter Padovani) in view of Lal et al. ("Distributed Resource Allocation for DS-CDMA based Multi-media Wireless LANs", 21 October 1998, IEEE Proceedings of MILCOM 1998, pg 583-588; hereafter Lal).

With respect to claim 1, Padovani discloses a method for high rate packet data transmission in a wireless CDMA system where a mobile station sends a request for high speed data transmission to a base station (810 of Figure 8; column 30, lines 11-18) and the base station sends a grant back to the mobile station (814, 816 of Figure 8; column 30, lines 11-18) to initiate the high speed data transmission (818 of Figure 8; column 30, lines 11-18).

Padovani does not disclose that the grant sent from the base station to the mobile station will establish a rate limit for further transmissions from the mobile station.

Lal, in a method for wireless communication networks, discloses a technique (Section 3: Distributed Resource Negotiation Protocol, pg 585, left column) for establishing data transmission between a transmitter and receiver that includes a grant message containing a specific rate of transmission (section 3.2.4 Transmitter: Session Setup Continued, pg 586, step 2 where the rate of transmission is r_{ij} in the CTS_{ji} message).

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in

the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 2, Padovani discloses a grant message for scheduling data transmission as an improvement to the IS-95 standard protocol.

Padovani does not disclose establishing a rate limit for the transmission with a different protocol.

Lal discloses a protocol named the Distributed Resource Negotiation Protocol for setting a data transmission rate in a grant message (Section 3 Distributed Resource Negotiation Protocol, pg 585).

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 3, Padovani does not disclose scheduling a subsequent reverse link transmission by the mobile station by sending a rate control instruction according to a second scheduling protocol.

Lal discloses a transmitter in a wireless network (viewed as equivalent to a mobile station) which receives SREJ messages for changing the transmission parameters (section 3.2.4 Transmitter: Session Setup Continued, pg 586, step 3b where the transmission is changed by the $SREJ_{ji}$ message).

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 4, Padovani discloses sending the grant message to the mobile station over a pilot/DRC channel (column 30, lines 42-45).

Padovani fails to disclose a second message component in the grant message sent over a second control channel.

Lal discloses a common control channel (CCCH in second paragraph, left column, pg 584) for sending a grant message with a data rate settings to a wireless transmitter.

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 5, Padovani fails to disclose sending a rate control instruction that indicates transmitting at a rate limit.

Lal discloses a transmitter in a wireless network (viewed as equivalent to a mobile station) which receives SREJ messages for sending data at a rate specificied in the grant (CTS_{ji} message) with a changed transmission parameter (section 3.2.4

Transmitter: Session Setup Continued, pg 586, step 3b where the transmission is changed by the $SREJ_{ji}$ message).

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 6, Padovani fails to disclose a rate control instruction and if the rate control instruction is not sent then no transmission is generated by the mobile station.

Lal disclose that a wireless transmitter, viewed as equivalent to the mobile station, will request a transmission with a receiver by sending a RTS_{ji} message then waiting for a CTS_{ji} message or $PREJ_{ji}$ message and if no CTS_{ji} message or $PREJ_{ji}$ message is received then no data will be transmitted.

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 7, Padovani further discloses a technique of sets a data rate request by transmitting relative value to indicate a higher or lower data rate (column

34, line 64—column 35, line 10). Padovani teaches the benefit of reduced transmission rate for control signals by sending relative values (column 35, lines 8-10).

Padovani does not disclose a rate control instruction as part of the grant message.

Lal discloses a grant message with a rate limit settings. One of ordinary skill in the art would realize this benefit by applying the relative value method to the rate limit control in the grant message as taught by Lal.

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 11, Padovani discloses a method for high rate packet data transmission in a wireless CDMA system where a mobile station sends a request for high speed data transmission to a base station (810 of Figure 8; column 30, lines 11-18) and the base station sends a grant back to the mobile station (814, 816 of Figure 8; column 30, lines 11-18) to initiate the high speed data transmission (818 of Figure 8; column 30, lines 11-18). The grant also resets a data rate limit from the lowest data rate to a higher data rate (column 29, lines 57-60).

Padovani does not disclose that the grant, by itself, sent from the base station to the mobile station will establish a rate limit for further transmissions from the mobile station.

Lal, in a method for wireless communication networks, discloses a technique (Section 3: Distributed Resource Negotiation Protocol, pg 585, left column) for establishing data transmission between a transmitter and receiver that includes a grant message containing a specific rate of transmission (section 3.2.4 Transmitter: Session Setup Continued, pg 586, step 2 where the rate of transmission is r_{ij} in the CTS_{ji} message).

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 12, Padovani discloses a grant message for scheduling data transmission as an improvement to the IS-95 standard protocol.

Padovani does not disclose establishing a rate limit for the transmission with a different protocol.

Lal discloses a protocol named the Distributed Resource Negotiation Protocol for setting a data transmission rate in a grant message (Section 3 Distributed Resource Negotiation Protocol, pg 585).

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in

the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 13, Padovani discloses a method for high rate packet data transmission in a wireless CDMA system where a mobile station sends a request for high speed data transmission to a base station (810 of Figure 8; column 30, lines 11-18) and the base station sends a grant back to the mobile station (814, 816 of Figure 8; column 30, lines 11-18) to initiate the high speed data transmission (818 of Figure 8; column 30, lines 11-18). The grant also resets a data rate limit from the lowest data rate to a higher data rate (column 29, lines 57-60).

Padovani does not disclose that the grant, by itself, sent from the base station to the mobile station will establish a rate limit for further transmissions from the mobile station.

Lal, in a method for wireless communication networks, discloses a technique (Section 3: Distributed Resource Negotiation Protocol, pg 585, left column) for establishing data transmission between a transmitter and receiver that includes a grant message containing a specific rate of transmission (section 3.2.4 Transmitter: Session Setup Continued, pg 586, step 2 where the rate of transmission is r_{ij} in the CTS_{ji} message).

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in

the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 14, Padovani discloses sending the grant message to the mobile station over a pilot/DRC channel (column 30, lines 42-45).

Padovani fails to disclose a second message component in the grant message sent over a second control channel.

Lal discloses a common control channel (CCCH in second paragraph, left column, pg 584) for sending a grant message with a data rate settings to a wireless transmitter.

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 17, Padovani discloses a method for high rate packet data transmission in a wireless CDMA system where a mobile station sends a request for high speed data transmission to a base station (810 of Figure 8; column 30, lines 11-18) and the base station sends a grant back to the mobile station (814, 816 of Figure 8; column 30, lines 11-18) to initiate the high speed data transmission (818 of Figure 8; column 30, lines 11-18).

Padovani does not disclose that the grant sent from the base station to the mobile station will establish a rate limit for further transmissions from the mobile station.

Lal, in a method for wireless communication networks, discloses a technique (Section 3: Distributed Resource Negotiation Protocol, pg 585, left column) for establishing data transmission between a transmitter (viewed as equivalent to a mobile station) and receiver that includes a grant message containing a specific rate of transmission (section 3.2.4 Transmitter: Session Setup Continued, pg 586, step 2 where the rate of transmission is r_{ij} in the CTS_{ji} message). Lal further discloses that if the transmitter receives SREJ messages for changing the transmission parameters (section 3.2.4 Transmitter: Session Setup Continued, pg 586, step 3b where the transmission is changed by the $SREJ_{ji}$ message).

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 18, Padovani discloses a method for high rate packet data transmission in a wireless CDMA system where a mobile station sends a request for high speed data transmission to a base station (810 of Figure 8; column 30, lines 11-18) and the base station sends a grant back to the mobile station (814, 816 of Figure 8; column 30, lines 11-18) to initiate the high speed data transmission (818 of Figure 8; column 30, lines 11-18). The grant also overrides a data rate limit from the lowest data rate to a higher data rate (column 29, lines 57-60).

Padovani does not disclose that the grant, by itself, sent from the base station to the mobile station will establish a rate limit for further transmissions from the mobile station.

Lal, in a method for wireless communication networks, discloses a technique (Section 3: Distributed Resource Negotiation Protocol, pg 585, left column) for establishing data transmission between a transmitter and receiver that includes a grant message containing a specific rate of transmission (section 3.2.4 Transmitter: Session Setup Continued, pg 586, step 2 where the rate of transmission is r_{ij} in the CTS_{ji} message).

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 22, Padovani discloses a method for high rate packet data transmission in a wireless CDMA system where a mobile station sends a request for high speed data transmission to a base station (810 of Figure 8; column 30, lines 11-18) and the base station sends a grant back to the mobile station (814, 816 of Figure 8; column 30, lines 11-18) to initiate the high speed data transmission (818 of Figure 8; column 30, lines 11-18). The grant also overrides a data rate limit from the lowest data rate to a higher data rate (column 29, lines 57-60).

Padovani does not disclose that the grant, by itself, sent from the base station to the mobile station will establish a rate limit for further transmissions from the mobile station.

Lal, in a method for wireless communication networks, discloses a technique (Section 3: Distributed Resource Negotiation Protocol, pg 585, left column) for establishing data transmission between a transmitter and receiver that includes a grant message containing a specific rate of transmission (section 3.2.4 Transmitter: Session Setup Continued, pg 586, step 2 where the rate of transmission is r_{ij} in the CTS_{ji} message).

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

With respect to claim 23, Padovani further discloses the mobile station will transmit NASK message on the reverse link channel after the grant arrives at the mobile station and it begins to transmit (column 35, lines 37-43).

With respect to claim 26, Padovani discloses a method for high rate packet data transmission in a wireless CDMA system where a mobile station sends a request for high speed data transmission to a base station (810 of Figure 8; column 30, lines 11-18) and the base station sends a grant back to the mobile station (814, 816 of Figure 8; column 30, lines 11-18) to initiate the high speed data transmission (818 of Figure 8;

column 30, lines 11-18). Padovani also discloses that the mobile station transmits a pilot signal on the reverse link (column 30, lines 40-45).

Padovani does not disclose that the power level of the pilot signal Is dervice from a granted rate for a requested transmission.

Lal, in a method for wireless communication networks, discloses a technique (Section 3: Distributed Resource Negotiation Protocol, pg 585, left column) for establishing data transmission between a transmitter and receiver that includes a grant message containing a specific rate of transmission and a specific power level (section 3.2.4 Transmitter: Session Setup Continued, pg 586, step 2 where the rate of transmission is r_{ij} and p_{ij} is the power level, both being part of the CTS_{ji} message).

Lal realizes the advantage of greater flexibility and faster transmission setup by using variable data rate settings in a grant message (Section 1: Introduction, pg 583, left column and right column). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Lal with the method of Padovani.

7. Claims 8-10, 15, 16, 19-21, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Padovani in view of Lal and further in view of Bae et al. (US 2003/0093364; hereafter Bae).

With respect to claim 8, Padovani does not disclose sending an extra schedule grant message that resets a rate limit.

Bae, in a related field of endeavor, discloses a base station that transmits a ReverseRateLimit (RRL) message to a mobile station in order to reset the rate limit of a previous transmission session (paragraph **[0014]**, paragraph **[0015]**, Table 3).

Bae realizes the benefit of overload protection for the base station by controlling mobile station data rates on the reverse link (paragraph **[0005]**). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Bae with the method of Padovani.

With respect to claim 9, Padovani does not disclose determining a change in rate limit between a previous transmission and a currently scheduled transmission and changing a rate limit if the change does not exceed a threshold.

Bae, in a related field of endeavor, discloses a mobile station that receives a Reverse Activity Bit (RAB) indicating a data rate change then comparing a threshold or Persistence Vector (PV) to a random number to decide if the current data rate will be modified by the mobile station (paragraph **[0008]**, paragraph **[0018]**).

Bae realizes the benefit of overload protection for the base station by controlling mobile station data rates on the reverse link (paragraph **[0005]**). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Bae with the method of Padovani.

With respect to claim 10, Padovani does not disclose sending an extra schedule grant message that resets a rate limit.

Bae, in a related field of endeavor, discloses a base station that transmits a ReverseRateLimit (RRL) message to a mobile station in order to reset the rate limit of a previous transmission session (paragraph **[0014]**, paragraph **[0015]**, Table 3).

Bae realizes the benefit of overload protection for the base station by controlling mobile station data rates on the reverse link (paragraph **[0005]**). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Bae with the method of Padovani.

With respect to claim 15, Padovani does not disclose decreasing a data rate limit when no rate control instruction is received and increasing a data rate limit when a rate control instruction is received.

Bae, in a related field of endeavor, discloses a base station that increases data rate when no RAB is received and decreases data when an RAB is received (paragraph **[0008]**). It would be obvious to reverse the effect of RAB with respect to its increase or decrease of the data rate.

Bae realizes the benefit of overload protection for the base station by controlling mobile station data rates on the reverse link (paragraph **[0005]**). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Bae with the method of Padovani.

With respect to claim 16, Padovani does not disclose adjusting a data rate limit based on sum of rate control instructions receiver since the initial grant message.

Bae, in a related field of endeavor, discloses a base station that increases data rate when no RAB is received and decreases data when an RAB is received (paragraph

[0008]). The base station sends the RAB periodically to the mobile station so that its effect it cumulative over time (paragraph **[0006]**).

Bae realizes the benefit of overload protection for the base station by controlling mobile station data rates on the reverse link (paragraph **[0005]**). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Bae with the method of Padovani.

With respect to claim 19, Padovani does not disclose changing the data rate setting for a mobile station based on the load at a base station and conducting the changing for a mobile station when the load at a base station is near congestion.

Bae, in a related field of endeavor, discloses a base station that controls overload conditions by commanding mobile station to increase or decrease data rate with an RAB sent periodically to mobile stations (paragraph **[0006]** and paragraph **[0005]**).

Bae realizes the benefit of overload protection for the base station by controlling mobile station data rates on the reverse link (paragraph **[0005]**). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Bae with the method of Padovani.

With respect to claim 20, Padovani does not disclose changing the data rate setting for a mobile station based whether or not the mobile station has ignored or responded to a schedule grant message.

Bae, in a related field of endeavor, discloses a base station that controls overload conditions by commanding mobile station to increase or decrease data rate with an RAB sent periodically to mobile stations (paragraph **[0006]** and paragraph **[0005]**).

Furthermore the base station is informed of a mobile station's current data rates by receiving and observing Reverse Rate Indicators (RRIs) send by the mobile station (paragraph **[0013]**).

Bae realizes the benefit of overload protection for the base station by controlling mobile station data rates on the reverse link (paragraph **[0005]**). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Bae with the method of Padovani.

With respect to claim 21, Padovani does not disclose changing the data rate setting for each mobile station based whether or not each mobile station has ignored or responded to a schedule grant message.

Bae, in a related field of endeavor, discloses a base station that controls overload conditions by commanding mobile station to increase or decrease data rate with an RAB sent periodically to mobile stations (paragraph **[0006]** and paragraph **[0005]**). Furthermore the base station is informed of each mobile station's current data rates by receiving and observing Reverse Rate Indicators (RRIs) send by each mobile station (paragraph **[0013]**).

Bae realizes the benefit of overload protection for the base station by controlling mobile station data rates on the reverse link (paragraph **[0005]**). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Bae with the method of Padovani.

With respect to claim 24, Padovani does not disclose adjusting a data rate limit based on sum of rate control instructions receiver since the initial grant message.

Bae, in a related field of endeavor, discloses a base station that increases data rate when no RAB is received and decreases data when an RAB is received (paragraph **[0008]**). The base station sends the RAB periodically to the mobile station so that its effect it cumulative over time (paragraph **[0006]**).

Bae realizes the benefit of overload protection for the base station by controlling mobile station data rates on the reverse link (paragraph **[0005]**). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Bae with the method of Padovani.

8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Padovani in view of Lal and further in view of Yoon et al. (US 2004/0203397; hereafter Yoon).

With respect to claim 25, Padovani does not disclose setting a secondary pilot level based on a weighted average of the secondary pilot levels corresponding to possible transmission rates.

Yoon, in the field of signal processing for CDMA system, discloses a method that computes a pilot weighted value at a receiver from multiple transmitter signals (paragraph **[0056]**, paragraph **[0057]**, and equation 4).

One of ordinary skill in the art would realize the benefit of less carrier to interface losses by using the power weighted estimate to set the pilot level of the mobile station in Padovani. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Yoon with the method of Padovani.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. O'Connor whose telephone number is 571-270-1081. The examiner can normally be reached on 9:00AM-6:30PM, M-F, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian T. O'Connor
April 4, 2007

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600